

## Patent claims

1. A method for synchronizing a plurality of digital input signals  $(x(k))$ , which are formed by sampling with the aid of a dedicated operating clock in each case, characterized in that
- digital auxiliary signals  $(x_d(nk+j), y_d(nk+j))$  are formed by sampling the digital input signals  $(x(k))$  with the aid of a common postprocessing clock,
  - use being made of a postprocessing clock which is at least twice as fast as the fastest operating clock, and
  - synchronized digital output signals  $(x(m), y(m))$  which correspond to the digital input signals  $(x(k))$  are formed by means of interpolating each digital auxiliary signal  $(x_d(nk+j), y_d(nk+j))$ .
2. The method as claimed in claim 1, characterized in that
- before being sampled with the aid of the common postprocessing clock, the digital input signals  $(x(k))$  are filtered with the aid of a filter (3) having a characteristic which is the inverse of the characteristic of an interpolation filter (12, 13) used for the interpolation.
3. The method as claimed in claim 1 or 2, characterized in that
- filtering with the aid of an antialiasing filter (14, 15) is undertaken directly after the interpolation.
4. The method as claimed in one of the preceding claims, characterized in that
- the digital input signals are obtained from secondary variables, sampled with the aid in each case of a dedicated, operating clock, of measuring.

- 10 -

transducers in an electric power supply system.

5. The method as claimed in claim 4, characterized in that

- 5 - in the case of digital input signals formed from secondary variables of Rogovsky measuring transducers the digital auxiliary signals are formed directly from these input signals, and
- an integrator is used for the interpolation.